

IX. Illinois River Basin

A. Basin Description

The Illinois River basin has a watershed of 28,906 square miles which includes the 673 square miles of the diverted Lake Michigan basin that also drains into the Illinois Waterway. The Illinois River within the Rock Island District extends from Lockport (river mile 290) to LaGrange (river mile 80). Upstream of river mile 230, the river is steep with a gradient of about 1.5 feet per mile. In the reach from river mile 230 to river mile 80, the gradient of the Illinois River is extremely flat (0.3 feet per mile). Numerous backwater areas and lakes parallel the main channel. Downstream of river mile 202, extensive levee systems have been built to protect agricultural areas in the wide floodplain.

B. Hydrology/Hydraulics

1. Description of Flooding

The Illinois River basin, shown on Plate 104, did not experience the large scale flooding that the other basins in the Rock Island District experienced. Of the gaging stations in the basin, only four had stages that ranked in the top five floods of record. Two of the four were on the Spoon River. For the months of April through September 1993 the runoff depth for the Spoon River at Seville, Ill., was 17.5 inches. The mean runoff depth for the months of April through September for the period of record (79 years) was 4.8 inches. Table 26 summarizes the top five floods of record for the rivers in the Illinois River basin.

Table 26
Illinois River Basin Top 5 Floods of Record

Station	Flood Stage (feet)	Date 1	Stage 1	Date 2	Stage 2	Date 3	Stage 3	Date 4	Stage 4	Date 5	Stage 5
Illinois River La Grange	N/A	5/26/43	447.1	3/10/82	446.60	7/27/93	445.95	4/15/82	445.80	12/ /82	445.55
Mackinaw River Green Valley	N/A	1/7/93	26.68	3/13/90	26.53	7/23/93	25.66	6/21/90	24.83	6/29/90	24.68
Spoon River London Mills	15.0	6/23/74	28.03	7/25/93	25.92	3/4/93	25.15	5/16/70	25.01	10/4/87	24.36
Spoon River Seville	22.0	7/26/93	32.99	6/24/74	31.82	8/22/24	30.77	3/6/85	29.85	3/21/48	28.05